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10/036,547	12/31/2001	Allan Scherr	E30-050CON2	4626

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EXAMINER

GOSSAGE, GLENN A

ART UNIT PAPER NUMBER

2187

DATE MAILED: 06/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/036,547	SCHERR, ALLAN	
	Examiner	Art Unit	
	Glenn Gossage	2187	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 28 May 2003.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 18-32 is/are pending in the application.

 4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 18-32 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 28 May 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☒ The proposed drawing correction filed on 28 May 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

 a) ☐ All b) ☐ Some * c) ☐ None of:

 1. ☐ Certified copies of the priority documents have been received.

 2. ☐ Certified copies of the priority documents have been received in Application No. _____.

 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

 a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

"each applicant policy"

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1. A Request for Continued Examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 28, 2003 has been entered.

2. The proposed drawing corrections filed May 28, 2003 have been approved by the Examiner, subject to drafting review.

The drawings remain objected to, however, because in Figure 2b, within steps 24b and 24d, it appears "Process" should be changed to --Processing for-- for clarity and consistency (note the changes made in steps 24f, 24h, 24j, 24l, 24n and 24p, for example).

Also, while the proposed drawing corrections have been approved, the drawings are objected to because in the proposed new Figure 1c, it is not clear to what the "Monitor" refers here, particularly since there is no Figure 2c in this application. [Was Figure 10b intended? Note that it is not adequately clear exactly to what the "monitor" refers (Figure 10b would not appear to represent a "monitoring means" or "monitor" as claimed.)]

Also, in Figure 3, --data-- should be inserted after "LRU" in step or "box" 38 (as was done in "box" or step 36b in the proposed drawing corrections, e.g.) for clarity and consistency (note page 22, lines 4-6, e.g.).

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In Figure 10b, within “box” or step 26f, it appears “page” should be changed to --page(s)-- for clarity and consistency (see page 31, lines 18-19, e.g.). Also, it appears steps 26c and 26d should be relabeled --26a-- and --26c--, respectively, for clarity and consistency (see Figure 10a, as well as page 31, line 12, e.g.).

[Note that while the response filed May 28, 2003 indicates (at page 18) that applicant “is submitting a clean set of drawings” that incorporates changes suggested by the Examiner, the response did not appear to include a clean set of drawings (submitted with a previous response?). Moreover, a copy of proposed corrections showing changes in red ink should be submitted for proper approval by the Examiner.]

Applicant is REQUIRED to submit a proposed drawing correction in reply to this Office action. However, submission of corrected drawings can be deferred until the application is allowed by the examiner, but corrected drawings should be filed as earlier as possible to prevent prosecution delays. Also note MPEP 608.02(r) and (v).

Appropriate correction is required.

3. The drawings are also objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “monitoring means” of claims 20-21 and 31-32 (part of the cache memory manager), as well as the “means response to messages

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...” of claim 29, must be shown or the features canceled from the claims. No new matter should be entered.

4. It is once again noted that the disclosure has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the disclosure. The following objections are specifically noted:

In the specification:

On page 5, line 17 (of the substitute specification filed November 18, 2002, it is not clear what is meant by “of the Reed Elsevier” here.

[Note that while the response filed May 28, 2003 indicates (at page 20) that “With respect to page 5, Applicant has amended the specification,” no amendments were made to page 5 of the specification.]

On page 5, line 18, it appears --(AOL)-- should be inserted before “of” (second occurrence) for clarity. The reticence in inserting the well known acronym “AOL” after “America Online” to more clearly identify the corporation is not readily understood.

In the amended paragraph beginning on page 12, line 4, at lines 2-4 of the amended paragraph, it appears “a single ... comprises” should be deleted for clarity and consistency with the disclosure as originally filed and to avoid possible questions of new matter. Similarly, in

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lines 5-6 and 9 of the amended paragraph, it appears "that acts ... 14" and "as a cache memory device" should be deleted, and in line 8, "Another" should be changed back to --A preferred-- for clarity and consistency with the disclosure as originally filed and to avoid possible questions of new matter. In line 13 of the amended paragraph, "of FIG. 16" is confusing since there is no Figure 16.

In the amended paragraph beginning on page 12, line 14, it appears "device" should be -- devices-- for clarity. Also, it appears "in a given mode" should be deleted for clarity and consistency with the disclosure as originally filed.

On page 13, line ¹³~~12~~, it appears "cache management method or a" should be changed (back) to simply -or-- for clarity and consistency with the disclosure as originally filed and to avoid possible questions of new matter.

In the amended paragraph beginning on page 18, line 3, at lines 4-5 of the amended paragraph, it appears "These steps act" should be changed to --The logic of the configurator, which acts--, and "are" in line 5 of the paragraph changed to -- , is--, for clarity and consistency with the disclosure as originally filed and to avoid possible questions of new matter.

In the amended paragraph beginning on page 20, line 6, at lines 9-11 of the amended paragraph, it is not entirely clear how a "step" 26 "monitors operations" (how is this related to the "monitoring means" as claimed, if at all?).

In the amended paragraph beginning on page 33, line 9, at line 3 of the amended paragraph, it appears "McIntosh" should be --MACINTOSH--. Also, it appears "Applescript" should be

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deleted for consistency with the disclosure as originally filed in the parent application and to avoid possible questions of new matter.

In the claims:

In claim 20, line 3, --data-- should be inserted before “node” for consistency. Also, “said” appears to read more clearly here as --the--. See also claim 21, line 4 and claim 31, line 4 (first occurrence).

In claim 29, line 2, “means response” should be --means, responsive-- for clarity. Also, “network for” in line 3 should then be --network, for-- for clarity.

In claim 32, line 3, it appears --data-- should be inserted before “nodes” for clarity and consistency.

Appropriate correction is required.

5. Claims 18-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 18, and therefore its dependent claims, the language “A data node at each of at least (two) sites in a data network” is somewhat unclear. Is “A (singular) data node being claimed? At least two data nodes? One or two sites?” A data network including at least two data nodes

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(sites)? Note also that the “sites” or “data nodes” (00, 02, 04 in Figure 1a, e.g.) appear to be coupled to the cache management systems 10.

In this regard, applicant’s arguments filed May 28, 2003 have been considered but are not persuasive. While the response desires to clarify the intent to cover a single data node (response at page 21), this is not at all clear from the claim language, which sets forth “A data node at each of at least (two) sites in a data network,” and a potential infringer is not apprised of what constitutes literal infringement. The plain meaning of the claim language would appear to indicate that at least two data nodes must be present for the claim to be infringed, while applicant believes only a single node is required for the claim to be literally infringed. It is also not adequately clear how “at least two” data nodes include a cache management system (support for language in the specification?). The proper antecedent for “said data node” throughout the claims is also not clear since there are plural data nodes set forth in the claim (see the plural “data nodes” in claim 1, lines 2-3, by way of example only). The proper antecedent for “said cache memory device” is also somewhat unclear since there are plural data nodes, each having a cache memory, set forth in the claims.

[Should “A data node” in line 1 be changed to --A data network comprising: a--, and “a” in line 2 be changed to --the--? Should “at least two of the data nodes” in lines 2-3 be changed to --each data node-- for clarity and consistency? Should “said” in lines 4 and 10, respectively, be

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changed to --each-- and --a corresponding--; “in said” in line 14 changed to --stored in said corresponding--; and “said” in line 15 changed to --one--?]

Also in claim 18, it is not entirely clear how the cache memory manager controls transfers “in response to” methods stored in the cache memory device (support for language in the specification?). Compare the clearer language of claim 19, e.g.

In claim 19, the proper antecedents for “said cache memory manager,” “said data node” and “said cache memory device” are unclear analogous to claim 18, since there are plural data nodes, each with a cache memory manager and cache memory device, set forth in the claim. [Should “said” in line 1 be changed to --each--, and “at said data node” in line 2 deleted? Should “in said” in line 4 be changed to --stored in a corresponding-- and “said” in line 5 changed to --that--.

It is also not entirely clear how the method controls “communications network communications.” [Should “communications network communications” simply be changed to --the cache memory device--?]

Claims 20 and 21 contain unclear antecedents analogous to claim 19 which uses similar language. [For example, should “said” in claims 20 and 21, line 1 be changed to --each--, and “at said data node” in claims 20 and 21, line 2 deleted? Should --at that data node-- be inserted after “means” (first occurrence) and “said” changed to --a corresponding-- in claim 20, line 4?

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Should "said" in claim 21, line 3 be changed to --a respective--, and --at that data node-- inserted after "means" in claim 21, line 4?]

Also in claims 20 and 21, as well as claims 31 and 32, it is not entirely clear to what the "monitoring means," which is within the cache memory manager, refers here, how it is connected or related to the other elements or "means" set forth in the claim. By way of example, it is not clear how the "monitoring means" is connected or related to the "method selection means" within the cache memory manager.

Applicants are again respectfully reminded that while 35 U.S.C. 112 sixth paragraph permits the use of "means plus function" language in a claim, this provision must always be considered as subordinate to the second paragraph of 35 U.S.C. 112 (see *In re Lundberg*, 244 F.2d at 547-548, 113 USPQ at 534 (CCPA 1979)). If one employs means plus function language in a claim, one must set forth an adequate disclosure showing what is meant by that language. If applicant fails to set forth such an adequate disclosure, applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112. See *In re Donaldson Company, Inc.*, 29 USPQ 2nd 1845 (Fed. Cir. 1994).

In the instant case, the language of the specification and claims is such that applicant has failed to provide an adequate disclosure showing to what the "monitoring means" refers in this instance. The terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description (in this regard, see also 37 CFR 1.75(d)(1)).

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Claims 29-32 are unclear analogous to claims 19-21, which use similar language, and should be similarly amended for clarity and consistency. [For example, in claims 29-32, line 1, it appears "said" should be changed to --each--, for clarity. Also in claim 29, line 2, it appears "in said" should be changed to --stored in a corresponding-- analogous to claim 19, line 4. Also, in line 5, it appears "communications with the network" should be changed to --the cache memory device at that data node-- or other similar language for clarity. In claim 30, line 2, it appears --means-- should be inserted after "storage" for clarity. In claims 31 and 32, lines 2 and 3, it appears "at said data node" should be deleted. In claim 31, it appears "said" (second occurrence) in line 3 should be changed to --a corresponding--, and "said" (second occurrence) in line 4 changed to --that--, for clarity. In claim 32, it appears "said" in line 4 should be changed to --a respective--, and "said" in line 6 changed to --a corresponding--, for clarity.]

Also in claim 29, it is not entirely clear to what the "means response to messages ... for selecting" refers here, or how it is connected or related to the other elements or "means" set forth in the claims such as the "method selection means" of claim 19.

Also in claims 31 and 32, it is not entirely clear to what the "monitoring means," which is within the cache memory manager, refers here, or how it is connected or related to the other elements or "means" set forth in the claim (support for language if the specification?).

In this regard, applicant's arguments filed May 28, 2003 have been considered.

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With regard to the various “means” set forth in the claims, applicant’s arguments with respect to the method selection means and method storage (means) have been considered in light of the disclosure as a whole and are persuasive. The claim language is deemed to define the subject matter with a reasonable degree of particularity and distinctness, i.e. the scope of the claims is deemed to be clear when the claims are read in light of the specification and applicants' remarks so as to allow one of ordinary skill in the art to which the claims are directed to be able to ascertain the “metes and bounds” of the invention.

However, with respect to the “monitoring means,” applicant’s arguments are not persuasive as it remains unclear to what the “monitoring means” as claimed refers, or how it is connected or related to the other elements or “means” set forth in the claims, particularly in light of the objection above to new Figure 1C (where does the disclosure describe the “monitoring means” as claimed). Similarly, it remains unclear to what the “means response to messages ... for selecting” of claim 29 refers here, or how it differs, if at all, from the “method selection means” (in this regard, also see 37 CFR 1.75(b)).

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Claims 18, 19 and 29, insofar as definite and clear, is rejected under 35 U.S.C. 102(b) as being anticipated by Willick et al or Korner, each taken separately.

With respect to claims 18, 19 and 29, Willick et al or Korner, each taken separately, discloses a data network including data “nodes” at each of first and second sites in the data network, each data “node” including a cache memory device connected to the data network, and a cache memory “manager” or controller connected to a respective cache memory device for controlling communications between the cache memory device and other sites in the data network, as in the present invention. Each of the cache memory managers or controllers controls transfers “in response to” one of at least two cache memory management methods (such as methods using simple LRU (or MRU) techniques, prefetching or preloading and frequency/usage based replacement (FBR) methods). The cache memory management method used or “selected” at a first site (a client workstation, e.g.) may be different than the cache management method used or selected at a second site (a server, e.g.). See pages 2-4 and 7-9 of Willick et al, and pages 220-221, 223 and 225-226 of Korner, e.g.

By storing different parameters to be used in making different cache management or replacement decisions, the references may be considered to “store” different cache management algorithms or “methods.” In this manner, different cache management algorithms or methods

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from all available cache management algorithms may be “selected” for different sites, i.e. a combination of different cache algorithms may be used to achieve optimum cache access efficiency and thus a higher operating speed. The systems may also monitor the performance of the cache management method currently being used or selected and adjustments may be made so as to further optimize cache management, i.e. different cache parameters, and thus a different cache management method, may be “selected” in order to optimize operation of the cache.

By way of example only, an LRU cache management algorithm or method, which may be selected from a plurality of cache management algorithms or methods, may be “selected” to optimize cache access efficiency at a particular network site and thus increase the operating speed. A user may thus configure and select the type of cache management algorithm to be used, which allows a user at a site in a network to address a particular need in an optimum way while, at the same time, allowing other network sites, such as a file server or content provider, to employ their own respective methods or solutions (selectively using MRU, preloading and read-ahead techniques, e.g.) to similarly address their own needs. This allows a user to optimize his or her site’s data usage need in an optimum manner without impacting other network sites.

[Note also that it would appear users on their home personal computers (PCS) connected to the Internet, which PCS include a cache memory device (the hard drive may cache Web pages, e.g.) and a cache memory “manager.” Users may optimize caching at their site or computer (by disabling caching or setting a cache size to zero, e.g.) or adjusting the cache size in a browser

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such as Netscape or Internet Explorer, using a cache “manager” so as to select which “method” to use. The claims as broadly written would appear to read on such users’ PCS or “data nodes.”]

7. Applicant’s arguments filed May 28, 2003 have been considered. It is believed applicant’s arguments have been addressed above.

Also, the argument that there is no suggestion of communications between different sites or different servers is not entirely understood as the servers in the references obviously “serve” data to clients and others on a network and thus “communicate” with the other sites.

The contention that the references suggest that the same caching algorithm must be used at every site in the network is not persuasive since the servers and workstations discussed can use the disclosed method to optimize caching for that site or data node, not for some other server or workstation. The response argues that Willick proposes using two caching algorithms “but only one at a time.” However, the claims indicate that the cache manager may “select” from the (at least) two cache management “methods,” i.e. only one of the methods is “selected” at one time.

Applicant’s arguments with respect to claims 20-28 and 30-32 are persuasive and these claims have been indicated as being allowable as noted below.

8. Claims 20-28 and 30-32, insofar as definite and clear, would appear to be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn Gossage whose telephone number is (703) 305-3820.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks, can be reached on (703) 308-1756.

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238

(After Final Communications)

(703) 746-7239

(Official Communications)

(703) 746-5713

(Use this FAX number only after approval by the Examiner, for "INFORMAL" or "DRAFT" communications. An Examiner may request that a formal paper/amendment be faxed directly to him or her on occasion.)



GLENN GOSSAGE
PRIMARY EXAMINER
ART UNIT 2187